

# BEST AVAILABLE COPY

TAP 1

## CURRICULUM VITAE

### 1. PERSONAL INFORMATION:

1.1 NAME: Darrell Lynn Peterson  
1.2 DATE AND PLACE OF BIRTH: March 2, 1944; Pittsburg, KS  
1.3 CITIZENSHIP: United States  
1.4 SOCIAL SECURITY NUMBER:  
1.5 MARITAL STATUS/CHILDREN: Married/two children  
1.6 HOME ADDRESS/TELEPHONE: 4345 Roundhill Drive Chesterfield, VA 23832 (804) 276-9354  
1.7 OFFICE ADDRESS/TELEPHONE: Department of Biochemistry  
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### 2. LICENSES: NOT APPLICABLE.

### 3. EDUCATION:

PhD, Biochemistry, University of Notre Dame, 1970  
BS, Biology, University of Notre Dame, 1966

### 4. MILITARY SERVICE RECORD:

U.S. Army, September 16, 1970 through March 20, 1972; Honorable Discharge

### 5. POSTDOCTORAL TRAINING:

University of Iowa. Post Doctoral Fellow (NIR), Department of Biochemistry, April 1972 through June 1975 (with Dr. R.L. Blakley).

### 6. ACADEMIC APPOINTMENTS:

University of California, San Francisco. Assistant Research Biochemist, June 1975 through June 1978 (with Dr. G.N. Vyas).

Virginia Commonwealth University. Department of Biochemistry, Assistant Professor, July 1978 through June 1984.

Virginia Commonwealth University. Department of Biochemistry, Associate Professor, July 1984 to 1990.

Virginia Commonwealth University. Department of Biochemistry, Professor, July 1990 to present.

### 7. MEMBERSHIP - SCIENTIFIC, HONORARY AND PROFESSIONAL SOCIETIES:

American Society of Biological Chemists.  
American Chemical Society.

### 8. MEMBERSHIP IN COMMUNITY ORGANIZATIONS:

Irrelevant

### 9. SPECIAL AWARDS, FELLOWSHIPS AND OTHER HONORS:

#### 9.1 Awards:

#### 9.2 Fellowships:

National Science Foundation Predoctoral Fellowship, 1966-1970.  
National Institutes of Health Postdoctoral Fellowship, 1972-1975.

9.3. External Grants:

NIH AI15955 Structure of Hepatitis B Proteins.

NIH GM28143 (Jun 1980-Jun 1983) Physical and Structural Studies  
of Hydroxymethylases. Co-Investigator with Verne Schirch.  
(\$120000)

CIT Grant (Sep 1985-Aug 1986) Molecular Biological Approaches  
to the Understanding of the Antigenic Structure of Hepatitis B Surface  
Antigen. (\$55000 CIT/\$55000 Matching Industrial Support, Abbott Laborato-  
ries)

US Spain Cooperative Grant (NSF) CCA 8510-034, 1985-1988,  
\$120000

CIT Grant (Sep 1989-Aug 1991) Development of a Field Assay for  
Equine Infectious Anemia Virus. (\$47000 CIT/\$47000 matching  
industrial support (Centaur Inc.))

NATO Grant (for cooperative project with L. Aggerbeck, Gif sur  
Yvette, France) 1984-85. \$5000, travel only.

Johnson & Johnson Focused Giving Award 1992-1993 (\$170,000)

9.4 Invited Seminars:

INVITED PRESENTATIONS AT MEETINGS

1978 International Symposium on Viral Hepatitis (San Francisco)  
1884 World Health Organization Meeting on Production of  
Hepatitis B vaccine in Mammalian Cells (Geneva)  
1984 Pan American Biochemistry Congress, Buenos Aires, Argentina  
1987 International Symposium on Viral Hepatitis (London)  
1989 International Symposium on Viral Hepatitis (Shanghai)  
1990 AASLD Single Topic Conference: Immunology and the Liver  
(Washington, DC)

INVITED SEMINARS AT OTHER INSTITUTIONS

UNIVERSITIES/RESEARCH INSTITUTIONS

National Institutes of Health, Infectious Diseases 1984  
Pasteur Institute, Department of Molecular Virology, Paris, France, 1985  
Molecular Genetics Center, National Center of Scientific Research, Gif-sur-  
Yvette, France, 1985  
College of William and Mary, 1986  
University of Missouri, Kansas City, MO. 1987  
Old Dominion University, 1990  
University of Maryland, 1992

INDUSTRIES

Genentech, South San Francisco 1983  
Abbott Laboratories, North Chicago, IL 1984, 1986, 1988  
AmGen, Thousand Oaks, CA 1987  
Biotronics Systems, Inc. Rockville, MD 1988, 1990  
Synbiotics Inc., San Diego, CA 1990  
Ortho Diagnostics, Inc, Raritan, NJ 1991, 1995  
Phytera, Inc. Worcester MA 1995

10. MAJOR COMMITTEES:

10.1 University/Department:

Four Year I&I Curriculum Review Committee  
Biochemistry Seminar Series Coordinator 1990-present

10.2 Professional--Panel, Boards, Councils:

National Research Council committee member for the  
awarding of NSF predoctoral fellowships NIH ad hoc  
member of various review panels

11. OTHER SIGNIFICANT SCHOLARLY, RESEARCH OR ADMINISTRATIVE  
EXPERIENCE:

11.1 Graduate Students Trained:

Deborah Paul  
Eloisa Guerrero  
Pam Hannaman  
James Lam  
Beth Ann Antoni  
Pei-sheng Hu  
Jian Zheng  
Sue Delos  
Ashley Birkitt  
Manisha Datta  
Kevin Leach

11.2 Postdoctoral Trainees:

Francisco Gavilanes  
Maria Teresa Villar-Lecumberi  
Julian Gomez

11.3 Major Teaching Assignments:

Graduate Biochemistry (Bic 503-4) 1978-1981, 1995-present.  
Undergraduate Biochemistry 1982-1985; 1997-present  
Enzymology 1986-present  
Bioorganic Chemistry 1987-88  
M1 Biochemistry (1996)

12. BIBLIOGRAPHY:

12.1 Papers Published:

1. Martinez-Carrion, M., Tiemeier, D.C. and Peterson, D.L.: The structure and enzyme-coenzyme relationship of supernatant aspartate transaminase after dye sensitized photooxidation. J. Biol. Chem., 245:799-805, 1970.
2. Peterson, D.L. and Martinez-Carrion, M.: The mechanism of transamination: Function of the histidyl residue at the active site of supernatant aspartate transaminase. J. Biol. Chem., 245:806-813, 1970.
3. Martinez-Carrion, M., Tiemeier, D.C. and Peterson, D.L.: Conformational properties of the isoenzymes of aspartate transaminase and the enzyme-substrate complexes. Biochemistry, 9:2574-2582, 1970.
4. Casey, F.B., Eisenberg, J., Peterson, D.L. and Pieper, D.: Altered antigen uptake and distribution due to exposure to extreme environmental temperatures or sleep deprivation. 15:87-93, 1974.
5. Gleisner, J.M., Peterson, D.L. and Blakley, R.L.: The amino acid sequence of dihydrofolate reductase from *S. faecium* and the position of the reactive methionine residues. Proc. Natl. Acad. Sci. USA, 71:3001-3005, 1974.
6. Gleisner, J.M., Peterson, D.L. and Blakley, R.L.: The structure of dihydrofolate reductase: Partial sequence and the order of the limited tryptic and cyanogen bromide peptides. J. Biol. Chem., 250:4937-4944, 1975.
7. Peterson, D.L., Gleisner, J.M. and Blakley, R.L.: The structure of dihydrofolate reductase from *S. faecium*: The amino acid sequence of peptide CNBr-7 and the complete sequence of the enzyme. J. Biol. Chem., 250: 4945-4954, 1975.

RES,

8. Peterson, D.L., Gleisner, J.M. and Blakley, R.L.: Bovine liver dihydrofolate reductase: Purification and properties of the enzyme. *Biochemistry*, 14:5261-5267, 1975.
9. Vyas, G.N., Roberts, I., Peterson, D.L. and Holland, P.V.: Nonspecific test reactions for antibodies to hepatitis B surface antigen in chronic HBsAg carriers. *J. Lab. Clin. Med.*, 89:428 -432, 1977.
10. Peterson, D.L., Roberts, I.M. and Vyas, G.N.: Partial amino acid sequence of two major component polypeptides of HBsAg. *Proc. Natl. Acad. Sci. USA*, 74:1530-1534, 1977.
11. Luan Eng Lie-Injo, Ganesan, J., Randhawa, Z.I., Peterson, D.L. and Kane, J.P.: Hb Leiden-B thalassemia in a Chinese with severe hemolytic anemia. *Am. J. Hematology*, 2:325, 1977.
12. Vyas, G.N., Peterson, D.L., Townsend, R.M., Damle, S.R. and Magnus, L.O.: Hepatitis B 'e' antigen: An apparent association with lactate dehydrogenase isozyme 5. *Science*, 198:1068 -1070, 1977.
13. Lie-Injo, L., Ganesan, J., Randhawa, Z.I., Kane, J. and Peterson, D.L.: Hemoglobin TAK in a newborn malay. *Hemoglobin*, 1:747, 1977.
14. Schirch, L. and Peterson, D.: Purification and properties of mitochondrial serine hydroxymethyltransferase. *J. Biol. Chem.*, 255:7801-7806, 1980.
15. Peterson, D.L.: Isolation and characterization of the major protein and glycoprotein of hepatitis B surface antigen. *J. Biol. Chem.*, 256: 6975-6983, 1981.
16. Peterson, D.L., Nath, N. and Gavilanes, F.: Structure of hepatitis B surface antigen: Correlation of subtype with the amino acid sequence and location of the carbohydrate moiety. *J. Biol. Chem.*, 257:10414-10420, 1982.
17. Gavilanes, F., Gonzalez-Ros, J. Manuel and Peterson, D.L.: Structure of hepatitis B surface antigen: Characterization of the lipid moiety. *J. Biol. Chem.*, 257:7770-7777, 1982.
18. Dreesman, G., Sparrow, J.T. and Peterson, D.L.: Antibody to hepatitis B surface antigen after a single inoculation of uncoupled synthetic HBsAg peptides. *Nature*, 295:158-160, 1982.
19. Lai, P., Pan, Y.E., Gleisner, J.M., Peterson, D.L. and Blakley, R.L.: Structure of dihydrofolate reductase: Primary sequence of the bovine liver enzyme. *Biochemistry*, 21:3284-3294, 1982.
20. Gavilanes, F., Peterson, D. and Schirch, L.: Methylmethane thiosulfonate as an active site probe of serine hydroxymethyltransferase. *J. Biol. Chem.*, 257:11431-11436, 1982.
21. Gavilanes, F., Peterson, D.L., Bullis, B. and Schirch, L.: Structure and Reactivity of cysteine residues in mitochondrial serine hydroxymethyltransferase. *J. Biol. Chem.*, 258:13155-13159, 1983.

22. Barra, O., Martini, F., Angelaccio, S., Bossa, F., Gavilanes, F., Peterson, D., Bullie, B. and Schirch, L.: Sequence homology between prokaryotic and eukaryotic forms of serine hydroxymethyltransferase. *Biochem. Biophys. Res. Comm.*, **116**:1007-1012, 1983.
23. Srivastava, S., Sasser, G., Peterson, D.L., and Drieka, S.P. Characterization of the fluorescein isothiocyanate reactive site of gizzard myosin ATPase. *Biochim. Biophys. Acta* **912**: 230-238 (1987).
24. Wright, C.S., Gavilanes, F. and Peterson, D.L.: Primary structure of wheat germ agglutinin, Isolectin II; Peptide order deduced from x-ray structure. *Biochemistry*, **23**:280-287, 1984.
25. Peterson, D.L., Paul, D.A., Lam, J. and Achord, D.T.: Antigenic structure of Hepatitis B surface antigen; Identification of the "d" subtype determinant by chemical modification and use of monoclonal antibodies. *J. Immuno.*, **132**:920-927, 1984.
26. Aggerbeck, L.P. and Peterson, D.L.: Electron Microscopic and Solution X-ray Scattering Observations on the Structure of HBsAg. *Virology* **141**: 155-161, 1985.
27. Milich, D.R., Peterson, D.L., Lerner, R.A. and Chipari, P.V.: Genetic Regulation of the Immune Response to HbsAg. *J. Immunology* **134**:396-407, 1985.
28. Peterson, D.L., Shires, T.K. and Krieter, P.A.: Assessment of Internal Primary Structure of Polypeptides Newly Translated *in Vitro* by Reticulocyte Lysate: A Study with Cytochrome B5. *J. Applied Biochemistry* **7**: 396-407, 1985.
29. Paul, D.A., Purcell, R.H. and Peterson, D.L.: Use of Monoclonal Antibodies to Determine if HBsAg of Mixed Subtype is One Particle or Two. *J. Virol. Methods*, **13**:43-53, 1986.
30. Peterson, D.L.: The structure of hepatitis B surface antigen and its antigenic sites. *Bioassays*, **6**:258-262, 1987.
31. Hu, Peisheng, Fiorenza, V., Carithers, R. and Peterson, D.L.: Quantitative studies of the hepatitis B viral pre-S proteins. *J. Virol. Met.*, **16**:97-114, 1987.
32. Gillece-Castro, B., Fisher, S.J., Tarentino, A.L., Peterson, D.L. and Burlingame, A.L.: Structure of the oligosaccharide portion of human hepatitis B surface antigen. *Arch. Biochem. Biophys.*, **256**:194-201, 1987.
33. Antoni, Beth. and Peterson, D.L.: Site Directed Mutagenesis of the Hepatitis B Surface Antigen Gene. *Viral Hepatitis and Liver Disease*, (A.J. Zuckerman, Ed.) Alan R. Liss. pp. 313-317, 1988.
34. Hu, Peisheng and Peterson, D.L.: Use of Monoclonal and Antipeptide Antibody to Study the Structure and Arrangement of the Pre-S Proteins of Hepatitis B Surface Antigen. *Viral Hepatitis and Liver Disease* (A.I. Zuckerman, Ed.) Alan R. Liss, pp. 318-322, 1988.



35. Guerrero, E., Gavilanes, F., Peterson, D.L.: Model for the Protein Arrangement in HBsAg Particles Based on Physical and Chemical Studies. *Viral Hepatitis and Liver Disease*, (A.J. Zuckerman, Ed.) Alan R. Liss, pp. 606-613, 1988.
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36. Bitter, G.A., Egan, K.M., Burnette, W.A., Saml, B., Fieschko, J.C., Peterson, D.L., Downing, M.R., Wypych, J., and Langley, K. Hepatitis B vaccine produced in yeast. *J. Med. Virol.* 25:123-140, 1988.
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55. Rodriguez-Crespo, I., Gutierrez, J., Nieto, M., Peterson, D.L., and Gavilanes, F. Prediction of a putative fusion peptide in the S protein of hepatitis B virus. *J. Gen. Virol.* 75, 637-639 (1994).
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- and *Salmonella typhi* for oral vaccination. *Infect. Immun.* 62, 1669-1676.
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- virus non-structural 3 protein. *J. Gen. Virol.* 77, 2721-2728 (1996)
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  83. Nunez, E., Wei, X., Delgado, C., Rodriguez-Crespo, I., Yelamos, B., Gomez-Gutierrez, J., Peterson, D.L., and Gavilanes, F. (2001) Cloning, expression, and purification of histidine-tagged preS domains of hepatitis B virus. *Protein Expr. Purif.* 21, 183-191.
  84. Yelamos, B., Nunez, E., Gomez-Gutierrez, J., Delgado, C., Pacheco, B., Peterson, D.L., and Gavilanes, F. (2001) Urea equilibrium unfolding of the major core protein of the retrovirus feline immunodeficiency virus

- and its tryptophan mutants. *Biochim Biophys Acta* 1546, 87-97.
85. Anthony, D., Post, A., Valdez, H., Peterson, D.L., Murphy, M., and Heeger, P.S. (2001) ELISPOT analysis of hepatitis C virus protein-specific IFN-gamma-producing peripheral blood lymphocytes in infected humans with and without cirrhosis. *Clin Immunol.* 99, 232-240.
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